From Woolly to Red:
A NOTE ON NAMES

Gould's artistry and entrepreneurial flair tend to overshadow the fact that he was a remarkably good systematic zoologist with an 'eye for species', even in the field of mammalogy, to which he devoted only a small part of his time. Like many of his contemporaries, he erected some mammal species which later turned out to be subspecies or varieties but 37 others are currently regarded as valid. No mammalogist – not even the prolific J. E. Gray or M. R. Oldfield Thomas – can match this record for Australian mammals.

In view of Gould's excellent scholarship, it may seem surprising that he should have used the specific name *laniger* for the Red Kangaroo. This was first proposed by the Frenchman J. P. Gaimard (as *Kangurus laniger*) in 1823 but there was an earlier species name, *Kangurus rufus,* erected by A. G. Desmarest of the Museum of Natural History, Paris, in 1822. In fact, the Frenchmen had no justification for the use of *Kangurus,* for the name *Macropus* had been applied to the Eastern Grey Kangaroo by the Englishman G. Shaw in 1789.

One can hazard a guess at when Gould put a name to his unpublished painting by examining the progressive changes in his nomenclature. In his account of the Red Kangaroo in "The Mammals of Australia" (1853), he listed the major synonyms as follows (I have added the dates):

Kangurus rutus Desmarest 1822
Kangurus laniger Gaimard 1823
Macropus lanigerus Gray 1843
Macropus laniger Bennett 1837
Macropus (Halmaturus) rufus Waterhouse 1846

In this publication he refered to the Red Kangaroo as *Osphranter rufus.* However, in his earlier "Monograph of the Macropodidae" (1841), which was substantially incorporated into "The Mammals of Australia", he had conformed with the prevailing (incorrect) usage and called it *Macropus laniger.* At that stage Gould regarded all the larger macropods as members of the genus *Macropus* but, in 1842, he erected a new genus *Osphranter* for the wallaroos.

In 1845 he wrote a zoological appendix to Strzlecki's account of his explorations in New South Wales, by which time he had also included the Red Kangaroo within the genus *Osphranter,* as *O. lanigerus.* Allowing a year between manuscript and printing, we can deduce that, at some time prior to 1844, he had ceased to regard the Red Kangaroo as a member of the genus *Macropus.* The unpublished painting must therefore have been labelled before 1844.

This sort of fiddling detective work is a harmless occupation of doddering taxonomists and occasionally serves to sort out problems of nomenclature. This is not the case here, where I am more concerned to maintain Gould's reputation. By the time of publication of 'The Mammals of Australia', he had realized that *laniger* (or variations on this name) was junior to *rufus* and had corrected this aspect of the nomenclature.

His concept of the genus *Osphranter* for the wallaroos and Red Kangaroo was remarkably insightful, for it was by no means obvious at the time that these species form a natural grouping, distinct from the other large macropods. Indeed, from about the 1930 s to the 1960 s, the Red Kangaroo was often placed in the monotypic genus *Megaleia* in contrast to all the other kangaroos, wallaroos and larger wallabies. However, current opinion, based on vastly greater evidence than was available to Gould, supports his idea of an *Osphranter*-group. Most workers feel that it should be recognized at the subgeneric level, e.g. *Macropus (Osphranter) rufus, M. (O.) robustus,* etc., but there are some experts who go along with Gould in regarding *Osphranter* as a genus. Whichever view prevails, it remains a great tribute to his powers of observation and analysis.

Ronald Strahan
The Australian Museum

ETHEL MARY READ

Thanks to two of our members who are Old Girls of Sydney Girls' High School, we can record some information about Ethel Mary Read, the benefactress for whom the Society's "Ethel Mary Read Awards" are named.

She was French mistress at Sydney Girls' High School when the school was transferred to the Moore Park Zoo site in 1922. Many buildings, ponds, etc., were part of the school grounds for a number of years and this "heritage" from the old zoo created great interest in both staff and students, hence Miss Read's lifelong interest in the zoo. When she died she bequeathed to the Royal Zoological Society a flat in Barncleuth Square. This flat was let for a number of years until we were advised to sell it, and the proceeds from this sale formed the Fund which is the basis of the Ethel Mary Read Awards.

Thank you to Mesdames Beryl Wright and Dot Hornibrook for this information.

Australian ZOOLOGIST

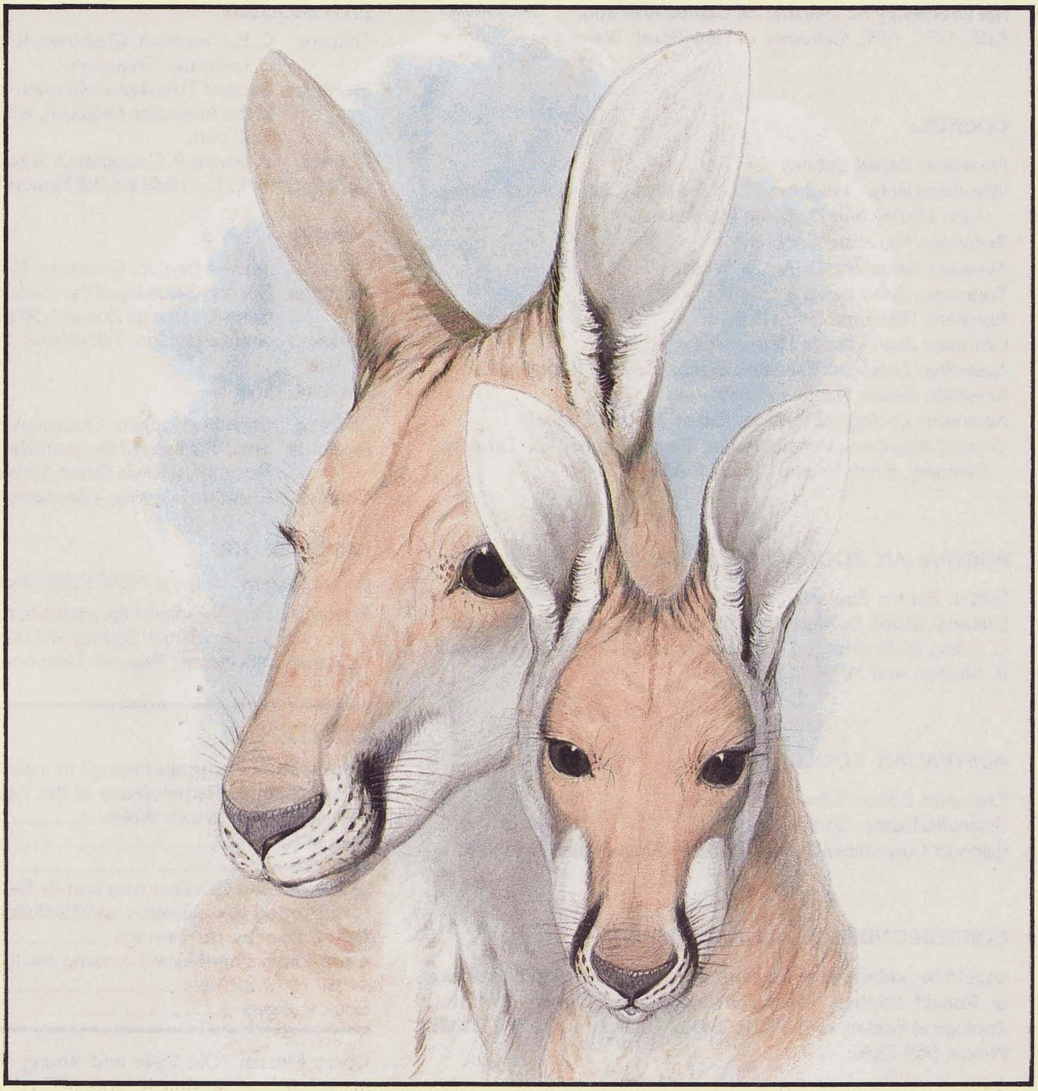
Vol. 24 No. 2
December 1987

Movement of Mammals Through Tunnels

Herpetofauna of Yathong Nature Reserve

Annual Report

A New Director for Taronga



Registered by
Australia Post
Publication No. 2752
ISSN 0067-2238

ROYAL ZOOLOGICAL SOCIETY OF NEW SOUTH WALES

Founded 24 March 1879
Incorporated 1961

PATRON:

His Excellency Air Marshal Sir James Rowland,
KBE, DFC, AFC, Governor of New South Wales

COUNCIL:

President: Daniel Lunney
Vice-Presidents: Leighton C. Llewellyn, Dr Gordon Grigg, John Disney and Dr David MacAlpine
Secretary: Marianne Cochrane
Assistant Secretary: Dr Arthur White
Treasurer: Jules LeRoi
Assistant Treasurer: Betty Bull
Librarian: Jean Claude Herremans
Australian Zoologist Executive Editor: Edward Wingfield
Scientific Editor: Daniel Lunney
Australian Zoological Reviews Editor: Ronald Strahan
Council Members: Penni Brydon, David Butcher, Dr Timothy Flannery, Erich Friese, Wendy Reid.

AUSTRALIAN ZOOLOGICAL REVIEWS

Editor: Ronald Strahan
Editorial Board: D. Anderson, M. Archer, K. Campbell, M. Cullen, G. Grigg, B. Jamieson, J. Kikkawa, A. Lee, I. Potter, D. Sandeman, R. Strahan and M. Whitten.

AUSTRALIAN ZOOLOGIST

Executive Editor: Edward Wingfield
Scientific Editor: Daniel Lunney
Editorial Committee: D. Lunney, D. McAlpine and E. Wingfield.

CORRESPONDENCE and MANUSCRIPTS

should be addressed to Edward Wingfield (Australian Zoologist) or Ronald Strahan (Australian Zoological Reviews) c/- Royal Zoological Society of NSW, P.O. Box 20, Mosman, NSW 2088. Phone: 969 7336.

Opinions expressed in articles published in this magazine are those of the author(s) and not necessarily those of the editor(s) or of the Council of the Royal Zoological Society.

SECTIONS

AVICULTURE

Officers:	Mr J. Raymond, Chairman. Mr K. S. Taylor, Secretary.
Meetings:	Third Tuesday of the month in the Society's rooms, Mosman at 8.00 p.m.
Contact:	Mr J. Raymond, 12 Wayella Street, West Ryde. Telephone: 858 4472.

CONCHOLOGY

Officers:	Mr J. LeRoi, Secretary.
Meetings:	Third Saturday of the month in the Society's rooms, Mosman at 2.00 p.m.
Contact:	Mr F. McCamley, 505 Princes Highway, Blakehurst 2221. Telephone: 546 5350.

ENTOMOLOGY

Officers:	C. E. Chadwick, Chairman. R. H. Mulder, Secretary. B. L. Brunet, Treasurer.
Meetings:	Second Tuesday of alternate months from February in the Australian Museum, William Street, Sydney at 7.30 p.m.
Council:	J. Stivala, P. Congdon, J. Wilson, M. Latham.
Contact:	Mr C. E. Chadwick, 9/2 Francis Road, Artarmon 2064.

JUNIOR

Officers:	Joanne Brydon, Chairman. Ron Davison, Secretary.
Meetings:	Second Saturday of the month in the Education Centre, Taronga Zoo at 1.30 p.m.
Contact:	Joanne Brydon. Telephone: 982 4629.

MAMMALOGY

Officers:	Christine Hopkins, Chairman. Murray Ellis, Secretary.
Meetings:	Third Tuesday of the month in the Australian Museum, William Street, Sydney at 8.00 p.m.
Contact:	Christine Hopkins. Telephone: 969 2777 (bus.)

ORNITHOLOGY

(In conjunction with the NSW Field Ornithologists Club)

Meetings:	First Tuesday of the month in the Australian Museum, William Street, Sydney at 8.00 p.m.
Contact:	Mrs Norma Maxwell. Telephone: 94 4278.

CONTENTS

Movement of Mammals through tunnels under railway lines . 89
A Survey of the Herpetofauna of the Yathong Nature Reserve, New South Wales 94
Annual Report 101-106
FRZS Citation 107
Spermatozoan Ultrastructure and its Bearing on Gastropod Classification and Evolution 108
A New Director for Taronga 114
A previously unpublished drawing by John Gould and H. C. Richter 115
Book Reviews .... 117-Inside Back Cover

COVER PHOTO: "Old Male and Young Male *Macropus laniger* from Life", a previously unpublished picture of Great Red Kangaroos by John Gould and H. C. Richter.

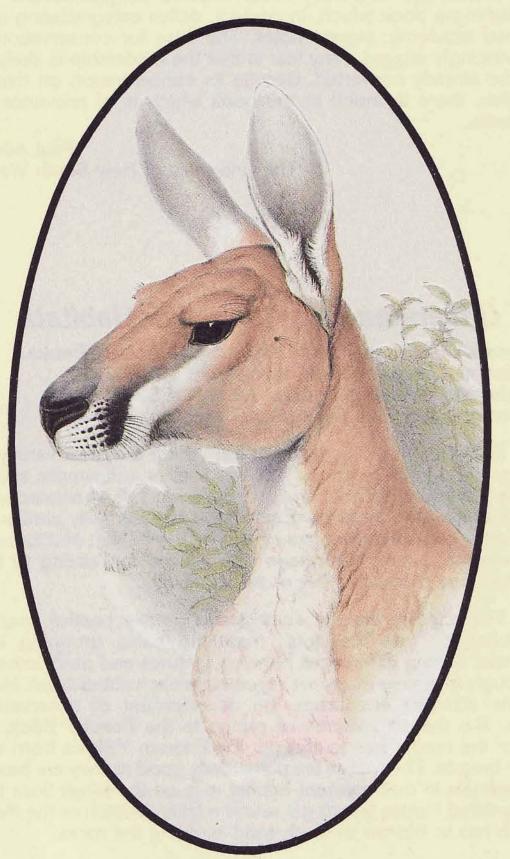


FIGURE 1: Head of the Great Red Kangaroo, by John Gould and H. C. Richter (*"Mammals of Australia"*, vol. 2, pl. 6).

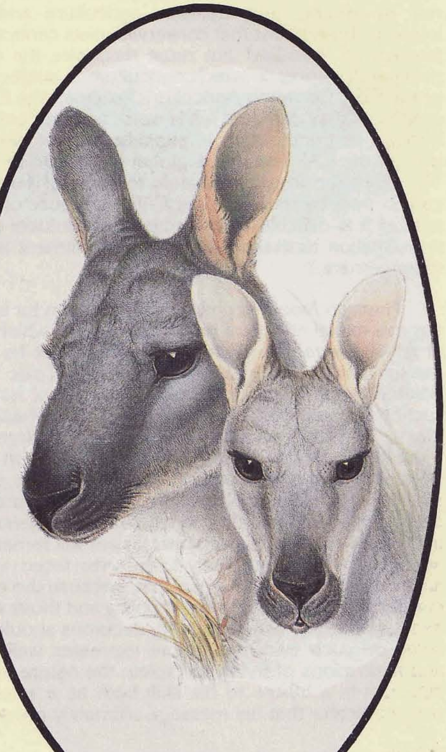


FIGURE 2: "Head of Male and of a Female, life size", depicting the Black Wallaroo, by John Gould and H. C. Richter (*"Mammals of Australia"*, vol. 2, pl. 10.). This pose is identical to that in the unpublished picture of the Great Red Kangaroos.